U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2008-101EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC59236

PROJECT NAME: Juniper 43-17 #1

LEGAL DESCRIPTION: NESE Sec. 17, T4N, R93W, 6th P. M.

APPLICANT: Samson Resources Company

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

> Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.
>
> Remarks: The proposed Juniper 43-17 #1 would be located within Management Unit 1 (Little Snake Resource Management Plan). One of the objectives of Management Unit 1 is to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for coal, oil, and gas resources.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: To provide for the development of oil and gas resources and to supply energy resources to the American public.

PUBLIC SCOPING PROCESS: The Notices of Staking (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning August 20, 2008 when the NOS was received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

DESCRIPTION OF PROPOSED ACTION: The proposed action is to approve one Application for Permit to Drill (APD) submitted by Samson Resources Company. Samson Resources Company proposes to drill one gas well on BLM administered land located near Hamilton, CO in the NESE Sec. 17, T4N, R93W, 6th P. M. An APD has been filed with the LSFO for the Juniper 43-17 #1. The APD includes drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Samson Resources Company in the drilling and surface use plans would be attached by the BLM as Conditions of Approval to an approved APD.

The proposed well would be located approximately 20 miles west of Hamilton, CO. Construction work is planned to start during the winter of 2009 and the estimated duration of construction and drilling of the well is 30 days. 436 feet of new access road would be constructed for the well resulting in new surface disturbance of 0.3 acres. All road construction would be on lease and on private surface and would not require a federal Right-of-Way.

The proposed well pad would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 1.75 acres would be disturbed for construction of the well pad. This would include the 250' by 300' well pad, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If the well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and re-vegetated. If the gas well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

Samson Company did not include plans for a gas sales pipeline with the APD.

Total surface disturbance for the proposed action would be 2.05 acres.

NO ACTION ALTERNATIVE: The "no action" alternative is that the well would not be permitted and therefore no well would be drilled. Samson Resources Company holds a valid and current oil and gas lease for the area where the proposed Juniper 43-17 #1 would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APDs through the mitigation of predicted environmental consequences. The proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, the no action alternative will not be analyzed further in this EA.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide. The proposed action would not adversely affect the regional air quality.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see ***An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado***, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, ***An Isolated Empire, A History of Northwestern Colorado***, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and ***Colorado Prehistory: A Context for the Northern Colorado River Basin,*** Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project, Samson Resources Juniper #43-17 #1, has undergone a Class III cultural resource survey:

Davenport, Barbara
2008 Class III Cultural Resources Inventory for the proposed Juniper #43-17-1 well location and short access road (250') in Moffat County, Colorado for Samson Resources Company (11.8.08).

The survey identified no eligible to the National Register of Historic Places cultural resources. The proposed project may proceed as described with the following mitigative measures in place.

Mitigative Measures: standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris 01/06/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action is located in an area of isolated dwellings. Oil & Gas development, ranching, and farming are the primary economic activities.

Environmental Consequences: The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. Neither alternative would directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Louise McMinn 12/19/08

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property would result from the proposed action.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides and on other disturbed areas. Canada thistle and several species of biennial thistles are known to occur in this area. Dalmation toadflax, houndstongue, Russian knapweed, diffuse knapweed and hoary cress (whitetop) are present in the vicinity of this project. Other species of noxious weeds are not known to be a problem in this area, but they can be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling the well, constructing the access road and other subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles and equipment brought onto the site can introduce weed species. Wind, water, livestock and wildlife would also assist with the distribution of weed seed into the newly

disturbed areas. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands and would occupy the disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can affect the establishment of seeded plant species. Establishment of perennial grasses and other seeded plants is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts have failed.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas along the road that would collect additional water. The largest concern in the project area would be for these species to become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well.

Mitigation attached as Conditions of Approval to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds.

Mitigative Measures: None.

Name of specialist and date: Ole Olsen 12/16/08

MIGRATORY BIRDS

Affected Environment: Brewers sparrow and sage sparrow are likely to be present in the project area during late spring and early summer. Golden eagles are also capable of nesting within the project area. There are no known active golden eagles nests at this time. All of these species are listed on the USFWS 2002 Birds of Conservation Concern List.

Environmental Consequences: Surface disturbing activities are restricted during most of the nesting period for Brewers sparrows and sage sparrows due to timing restrictions imposed by the BLM to protect greater sage-grouse. Surface disturbing activities could occur during the month of July and it is possible that some nests could still be active or that young birds not capable of moving out of the way of construction equipment could still be present. There is a moderate potential for take of these two species of birds to occur.

Recent studies have indicated that birds have entered heater treater facilities through open vents. Birds have been entrapped and have died in these facilities as a result of gasses held in the facilities.

Mitigative Measures: All open vent stack equipment such as heater treater, separators, dehydration units, and flare stacks shall be designed and constructed to prevent birds and bats from entering or nesting in or on such units, and to the extent practical, to discourage birds from perching on the stacks.

Name of specialist and date: Timothy Novotny 12/17/08

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 5, 2008. The letter listed the FY08 and FY09 projects that the BLM would notify them on and projects that would not require notification. A follow up phone call was performed on June 16, 2008. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 01/06/09

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered species or habitats for such species present within the proposed project area. The proposed well site does provide suitable nesting habitat for greater sage-grouse, a BLM special status species.

Environmental Consequences: The proposed well site falls within two miles of an active sage-grouse lek. This well provides nesting habitat for sage-grouse. If drilling activities were to take place during the breeding or nesting season (March 1 to June 30), significant impacts to sage grouse using this habitat would be expected. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, nest abandonment, destruction of nests and loss of habitat. Other impacts, such as habitat fragmentation and the spread of exotic plants can also degrade sage grouse habitat (Connelly et al. 2004). Noise and increased human activity related to drilling can disrupt breeding and nesting (Connelly et al. 2004). Holloran and Anderson (2004) found a higher annual decline in male lek attendance at leks within 3.2 km from drilling activity. To

prevent significant impacts to sage grouse species, construction and drilling activities associated with the proposed access road, pipeline and well pad should not be permitted from March 1 to June 30. This timing limitation would prevent accidental nest destruction, nest and lek abandonment and displacement into less suitable habitat. The proposed project would result in a loss of approximately 2 acres of nesting habitat.

Bureau of Land Management. 1991. Colorado Oil and Gas Leasing and Development. Final Environmental Impact Statement. U.S. Dept. of Interior.

Connelly, J.W., S.T. Knick, M.A. Schroeder and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

Holloran, M.J., and S.H. Anderson. 2004. Sage-grouse response to natural gas filed development in northwestern Wyoming. Page 16 in Proceedings of the 24th Meeting of the Western Agencies Sage and Columbian Sharp-tailed Grouse Technical Committee. Wenatchee, Washington (Abstract).

Mitigative Measures: CO-30, No surface disturbing activities between March 1 and June 30 in order to protect nesting greater sage-grouse.

Name of specialist and date: Timothy Novotny 12/17/08

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive species present within or in the vicinity of the proposed well.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 12/19/08

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

WATER QUALITY – GROUND

Affected Environment: The Trout Creek Sandstone aquifer of the Iles formation and the aquifer of the Dakota Formation would be penetrated by this well.

Environmental Consequences: The drilling plan calls for cementing of the production and surface casing; the cemented casing will protect these aquifers.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 12/17/08

WATER QUALITY/HYDROLOGY – SURFACE

Affected Environment: The proposed well would be constructed near Collum Gulch, an ephemeral drainage. Any runoff from the well pads, pipelines, or access roads would drain into Collum Gulch. All stream segments near the well pad location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the well site would drain towards Collum Gulch, which is an ephemeral tributary to the Yampa River. Increased sedimentation to Collum Gulch during spring runoff or from high intensity rainstorms would be the most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval would reduce the potential impacts caused by surface runoff.

Mitigative Measures: None.

Name of specialist and date: Roy McKinstry 12/11/08

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian zones present within the proposed project area.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Timothy Novotny 12/17/08

WILD & SCENIC RIVERS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Roy McKinstry 12/11/08

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Roy McKinstry 12/11/08

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: This well would penetrate the Iles, Mancos Shale, and the Niobrara; the Niobrara is the target formation for oil. The casing and cementing programs will protect the downhole resources.

Environmental Consequences: The proposed casing and cementing programs appear to be adequate to protect and/or isolate all resources identified above. The entire hole is cased with cement behind pipe.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 12/17/08

PALEONTOLOGY

Affected Environment: The surface formation at the well site is the Cretaceous Iles overlain by Quaternary soils. This area is rated as PFYC Class 4(b) (High), based on geologic unit.

Environmental Consequences: PFYC Class 4(b): the potential for impacting significant fossils is high; surface disturbing activities may require field assessment to determining an appropriate course of action.

Mitigative Measures: Unusual occurrences of plant and invertebrate fossils should be recorded, and representative examples may be collected if appropriate. Concentrations of common plant or invertebrate fossils that may be suitable for public hobby collection areas should also be noted and reported to the Field Office paleontology program coordinator or paleontology program lead. Additional mitigation measures may be appropriate in some cases for these types of localities. If vertebrate fossil material is discovered during construction activities, surface disturbing actions shall halt until an assessment of the find is completed and appropriate protection measures taken. The Authorized Officer should be notified as soon as possible of the discovery and any mitigation efforts that were undertaken. If the find cannot be mitigated within a reasonable time, the concurrence of the Authorized Officer or official representative for a longer work stoppage must be obtained. Work may not resume until approval is granted from both the PI or Field Agent and the Authorized Officer.

During operations, if any vertebrate paleontological resources are discovered, in accordance with Section 6 of Form 3100-11 and 43 CFR 3162.1, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Craig BLM office shall be notified within 48 hrs of the discovery, and a decision as to the preferred alternative/course of action will be rendered.

Name of specialist and date: Jennifer Maiolo 12/17/08

SOILS

Affected Environment: The proposed well would be found within the Ninot-Crago-Garlips unit. Slopes within this unit average 15 to 45 percent. The soils are Eolian deposits derived from colluviums derived from sandstone and basal conglomerate. Generally, these soils are well drained. The mean annual precipitation is 9 to 11 inches and the runoff class is medium.

Environmental Consequences: The construction and operation of the proposed well would affect soils within and immediately adjacent to the proposed area of disturbance. Increased soil erosion from wind and water would occur during construction of the well pad, and access roads. Erosion would continue throughout the operational life of the well. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Vegetation and soil would be removed from approximately 2.05 acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water

infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation would reduce the potential to have excessive sediments and salts in runoff water from the well site.

Mitigative Measures: Additional mitigative measures would be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the access road and well pad.

Name of specialist and date: Roy McKinstry 12/11/08

UPLAND VEGETATION

Affected Environment: The proposed well is located in a sagebrush-grass plant community. Dominant plants present include Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), basin big sagebrush (*A. tridentata tridentata*), green rabbitbrush (*Chrysothamnus viscidiflorus*), Utah juniper (*Juniperus utahensis*), prickly pear (*Opuntia* spp.), Hood's phlox (*Phlox hoodii*), needle-and-thread (*Stipa comata*), Indian ricegrass (*Oryzopsis hymenoides*), and squirreltail (*Sitanion hystrix*). Non-native species present include crested wheatgrass (*Agropyron cristatum*), cheatgrass (*Bromus tectorum*), and Japanese brome (*Bromus japonicus*). This site is on relatively heavy soils and, as such, is highly susceptible to invasion by annual grasses associated with disturbance. Overall density of non-native species is not excessive relative to the native community.

Environmental Consequences: The proposed action would completely remove approximate 2.05 acres of native vegetation. This removal would be minimal within the larger plant community. Because this site is highly susceptible to invasion by invasive annual grasses such as cheatgrass and Japanese brome, proper reclamation practices such as weed control and seeding would be especially important in ensuring that the additional introduction of these species through disturbance is kept to a minimum. As long as the required reclamation practices are fully followed, overall impacts to the plant community would be minimal.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 12/19/08

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed project area provides productive year round habitat for pronghorn antelope, mule deer and elk including severe winter range for mule deer and elk. A variety of small mammals, song birds and reptiles may also be found in the project area at various times of the year.

Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Impacts would mostly occur from habitat modification or displacement during construction activities. Displacement from the project area could force big game animals to use less suitable habitat and would likely increase stress during winter months when the animal's physical condition is already depleted. Construction of the access road and well pad, and drilling of the well during winter months (December 1 through April 30), should be avoided in order to protect wintering mule deer and elk. If construction is conducted during this time period, it could negatively impact wintering animals.

Most small mammals, birds and reptiles using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigative Measures: CO-9, No surface disturbing activities between March 1 and April 30 in order to protect wintering mule deer and elk.

Name of specialist and date: Timothy Novotny 12/17/08

OTHER NON-CRITICAL ELEMENTS:

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management	RM 01/08/09		
Hydrology/Ground		JM 12/17/08	
Hydrology/Surface		RM 12/11/08	
Paleontology		JM 12/17/08	
Range Management		JHS 12/19/08	
Realty Authorizations	LM 12/19/08		
Recreation/Transportation		GMR 12/16/08	
Socio-Economics		LM 12/19/08	
Solid Minerals		JM 12/17/08	
Visual Resources		GMR/12/16/08	
Wild Horse & Burro Mgmt	RM 01/08/09		
Wildlife, Aquatic	TM 12/17/08		

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the proposed well when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the area. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site, access road, and future pipeline routes, but should return once construction is completed. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The proposed project area provides quality habitat for a variety of big game, small mammals, song birds and reptilian wildlife. Mule deer and elk use the area for severe winter range. Construction and drillings activities during winter months would have a negative impact on mule deer and elk. This standard is currently being met. While some decreased level of production is expected, this area would still be capable of supporting wildlife species once this project is completed. This standard would continue to be met.

Name of specialist and date: Timothy Novotny 12/17/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal) STANDARD: The development of the well pad and associated access road would not impact any federally listed threatened or endangered species or their habitats. This project would result in the loss of approximately 2.05 acres of nesting habitat for greater sage-grouse, a BLM special status species. If construction and drilling activities are conducted outside of the nesting season for greater sage-grouse, impacts to sage-grouse would be minimized. This standard is currently

being met and would continue to be met under both the No Action Alternative and the Proposed Action Alternative.

Name of specialist and date: Timothy Novotny 12/17/08

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: Due to the presence of non-native cheatgrass and Japanese brome, the site of the proposed well is minimally meeting this standard. The proposed well would completely remove a small portion of native vegetation within the larger plant community and increase the potential for increased abundance and density of these species in adjacent, undisturbed areas. Required reclamation practices including weed control and reseeding disturbed areas with native species would greatly reduce this impact and ensure that this standard continues to be met.

Name of specialist and date: Hunter Seim 12/19/08

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant) STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the proposed well. This standard does not apply.

Name of specialist and date: Hunter Seim 12/19/08

RIPARIAN SYSTEMS STANDARD: There are no wetlands or riparian zones present within the proposed project area. This standard does not apply

Name of specialist and date: Timothy Novotny 12/17/08

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the pipeline corridors would be completed immediately after installation to minimize sheet and rill erosion from the corridor. Interim reclamation of the unused area on the well pad would be completed to minimize sheet and rill erosion from the well site. When the well pad is no longer needed for production operations, the disturbed well pad and access road would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Roy McKinstry 12/11/08

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, but it is not expected to while the well location, pipeline, and access road is used for operations. The well pad site, pipeline corridor, and access road would not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that would reduce impacts to and conserve soil materials. Upland soil health would return to the well pad, pipeline corridor, and access road disturbances after reclamation practices and well abandonment has been successfully achieved.

Name of specialist and date: Roy McKinstry 12/11/08

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
EA CO-100-2008-101

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.

2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.

3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.

4. There are no highly controversial effects on the environment.

5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.

6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.

7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.

8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

DECISION AND RATIONALE:
I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD 12-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC592364, Juniper Well 43-17 #1 .

COMPLIANCE PLAN(S):

Compliance Schedule
Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan
The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility
Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: